Remarks

This REPLY is in response to the Office Action mailed November 20, 2006. A Petition for Extension of Time is submitted herewith, together with the appropriate fee. No fee is due for the addition of new claims.

I. Summary of Examiner's Rejections

Prior to the Office Action mailed November 20, 2006, Claims 1-20 were pending in the Application. In the Office Action, the Specification was objected to for various informalities. Claims 1-20 were provisionally rejected under the doctrine of obviousness-type double patenting as being unpatentable over the claims of copending Application Nos. 10/602,037; 10/602,038; and 10/601,929. Claims 1-20 were also rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. Claims 1-20 were also rejected under 35 U.S.C. 103(a) as being unpatentable over Fuchs (U.S. Patent Publication No. 2003/0177477), in view of Najmi (U.S. Patent No. 6,753,889).

II. Summary of Applicant's Amendment

The present Reply amends Claims 1, 2, 6, 11, 12 and 16; cancels Claims 7, 9-10, 17 and 19-20; and adds new Claims 21-26, leaving for the Examiner's present consideration Claims 1-6, 8, 11-16, 18 and 21-26. An appropriate Terminal Disclaimer is also being filed herewith. Reconsideration of the Application, as amended, is respectfully requested.

III. Amendments to the Specification

In the Office Action mailed November 20, 2006, the Specification was objected to for various informalities. Accordingly, the Specification has been amended as shown above. Applicant respectfully submits that the proposed amendments correct informalities in the Specification and that no new matter is being added.

IV. Claim Rejections under Double Patenting

In the Office Action mailed November 20, 2006, Claims 1-20 were provisionally rejected under the doctrine of obviousness-type double patenting as being unpatentable over the claims of copending Application Nos. 10/602,037; 10/602,038; and 10/601,929.

Accordingly, filed together with this Reply is an appropriate Terminal Disclaimer in compliance with 37 CFR 1.321. Applicant respectfully submits that the filing of a Terminal Disclaimer renders moot the rejection of the claims under the doctrine of obviousness-type double patenting, and reconsideration thereof is respectfully requested.

V. Claim Rejections under 35 U.S.C. §112

In the Office Action mailed November 20, 2006, Claims 1-20 were rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Accordingly, Claims 1-20 have been amended as shown above. Applicant respectfully submits that the claims as amended now conform to the requirements of 35 U.S.C. 112, and reconsideration thereof is respectfully requested.

VI. Claim Rejections under 35 U.S.C. §103(a)

In the Office Action mailed November 20, 2006, Claims 1-20 were rejected under 35 U.S.C. 103(a) as being unpatentable over Fuchs (U.S. Patent Publication No. 2003/0177477), in view of Najmi (U.S. Patent No. 6,753,889).

Claim 1

Claim 1 has been amended to more clearly define the embodiment therein. As amended, Claim 1 defines:

> *1. (Currently Amended) A system including a web-based interface for use with an application program interface, comprising:*
>
> *a computer including a processing device and a client operating thereon;*

a web application including a user interface that executes on the client and allows a user to enter markup language commands and communicate said markup language commands to a remote server for processing thereon;

a command processor that executes on a remote server, that receives and validates the markup language commands, and, for each markup language command converts the markup language command into a command object for communication to a command dispatcher;

a command dispatcher that executes on the remote server and that receives command objects from the command processor and, for each command object, assigns the command object to one of a plurality of categories corresponding to a plurality of application program interfaces; and

a plurality of processor modules that execute on the remote server, including a processor module for each category of application program interface, wherein each processor module receives the command objects assigned to its category, and performs appropriate operations against the corresponding application program interface at the remote server.

Claim 1 has been amended to more clearly define the embodiment therein as comprising a web application including a user interface that executes on the client and allows a user to enter markup language commands and communicate said markup language components to a remote server. A command processor executes on the remote server, and, for each markup language command converts the markup language command into a command object for communication to a command dispatcher. The command dispatcher assigns the command object to one of a plurality of categories corresponding to a plurality of application program interfaces. A plurality of processor modules, including a processor module for each category of application program interface, receives the command objects assigned to its category, and performs appropriate operations against the corresponding application program interface, at the remote server.

The advantages of the embodiment defined by Claim 1 include that the system abstracts the complexity of using various API's (such as the JMS and the JMX API's) into a number of simpler markup tags. The system also presents the user with a client-side web application and user interface, through which the user can easily enter markup tags, and programs that include markup tags. This allows multiple operations, spanning multiple types of API, to be defined within a single program, and then communicated to a remote server. For example, in one embodiment

operations can be entered at the client as a Java Message Service Markup Language (JMSML) program or a plurality of JMSML commands. The user interface then communicates the JMSML or markup language commands from the client to the server. Once received at the remote server, the system parses the JMSML commands to determine which category of API the command should be directed to, before communicating the commands to the appropriate API. Since the system abstracts much of the complex operation of the API's, it allows a software developer to access complex API's at a server by modifying a user-friendly web interface at a client.

Fuchs discloses a mapping engine, capable of receiving descriptions of manageable software objects in a first language, for generating management information in a second language. (Abstract). As described therein, the Java Management Extension (JMX) provides a means to make application objects independent from the protocol from which they will be accessed for management. (Paragraph [0003]). However, some protocols, like SNMP, require some glue-code to be generated in order to provide the adaptation. Such glue-code comprises e.g. metadata, i.e. information about the structure of the objects described in the management interface. (Paragraph [0005]). One embodiment proposes a mapping engine, capable of receiving descriptions of manageable software objects in a first language, for generating management information in a second language, said mapping engine being further capable of generating a set of mapping metadata, corresponding to the management information as generated. (Paragraph [0009]). First, the SNMP MIBs are written, using the SMI (v1 or v2) syntax. Then, the MIB is fed to the mibgen compiler, which generates the metadata and the Java MBean interfaces that the application MBean must implement in order to be accessed through SNMP. As obtained, the internal information model (in JMX) is not exactly independent from the protocol (e.g. SNMP), since it has been generated from the MIB. (Paragraphs [0137]-[0139]).

Najmi discloses a business to business (B2B) message adapter generation tool for use in describing a B2B message adapter in an enterprise computer system. In one embodiment, the enterprise computer system is a J2EE based enterprise computer system. The B2B messenger is coupled to a Java Message Service API (referred to as JMS) that provides an interface between the B2B messenger and the various business components included in the J2EE based enterprise computer system. (Column 3, Lines 49-57).

It appears from the above description that, as disclosed by Fuchs, the system therein is directed to mapping SNMP MIB to Java Mbeans and JMX. In particular, a software developer must first write the SNMP MIBs using the SMI syntax. The MIB is then fed to an mibgen compiler which generates the metadata and the Java MBean interfaces that a subsequent application MBean must implement, in order to be accessed through SNMP. The primary focus of the invention appears to be to allow a skilled SNMP developer to create MIB descriptions for SNMP agents. These MIB descriptions for SNMP agents can then be provided to a Java developer in a way that the Java developer, who may not be skilled in working SNMP, can write their (Java-based) applications against the SNMP agents using JMX.

Applicant respectfully submits that the system disclosed by Fuchs appears to be different from that defined by Claim 1, as currently amended. For example, Fuchs does not appear to disclose *a web application including a user interface that executes on the client and allows a user to enter markup language commands and communicate said markup language commands to a remote server*. Nor does Fuchs appear to disclose a command processor that validates the markup language commands, and *converts the markup language command into a command object* for communication to a command dispatcher; or a command dispatcher that *assigns the command object to one of a plurality of categories corresponding to a plurality of application program interfaces*. As described in Fuchs, the software developer wishing to access the SNMP agent would still need to be very familiar with programming their application against the JMX API. In contrast, embodiments of the present invention are designed to alleviate the developers need to program directly against a JMS, JMX, or other API.

It further appears from the above description that, as disclosed by Najmi, the system therein is directed to a method of JMS message generation that can be used in B2B workflow messaging. In particular, the system therein allows communications between two business workflow processes using the publish-subscribe features of JMS or a similar messaging platform. However, Applicant respectfully submits that Najmi does not appear to disclose tools or features that would allow a developer to more conveniently program those JMS messages. Thus Najimi does not appear to disclose the features of Claim 1, as currently amended.

Furthermore, Applicant respectfully submits that, notwithstanding the comments provided above, it would not have been obvious to one of skill in the art to combine each of the cited references in the manner suggested, so as to anticipate the claimed embodiment. To establish a prima facie case of obviousness, three criteria must be met: (1) a suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine the reference teachings; (2) a reasonable expectation of success; and (3) the prior art references when combined must teach or suggest all the claim limitations. MPEP §2143. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in the applicant's disclosure. In re Vaeck, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). In addition, the fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. In re Mills, 916 F.2d 680, 16 USPQ2d 1430 (Fed. Cir. 1990).

In the present instance, Applicant has not been able to find any suggestion in the cited references themselves or in the knowledge generally available to one of ordinary skill in the art, that would render the resultant combination obvious or desirable. In particular, it appears that Fuchs is primarily directed to Java-to-SNMP mapping, and does not appear to teach a command processor that converts markup language components into one of JMS or JMX operations. Nor does Fuchs appear to describe the use of JMS. On the other hand, Najmi appears to be primarily directed to a means of coupling a B2B messenger to JMS, and does not appear to describe the use of markup languages, or JMX. As such these two references appear to be directed to different Java-based interfaces, and different technologies associated with those interfaces. In the Office Action it was submitted that it would have been obvious to modify Fuchs using the teachings of Najmi, since both inventions are directed towards transparent protocols for enterprise messaging using Java messaging services. The ability to simultaneously program against both JMS, JMX (and other interfaces), using a simple markup language, is a useful feature of the present invention, but does not appear to be suggested by any of the cited references. Furthermore, the fact that two references are in the same general area, or could be combined, is not sufficient showing under 103

that their combination is obvious. As such, Applicant respectfully submits that the suggested combination of references lacks evidentiary support by the prior art.

In view of the comments provided above, Applicant respectfully submits that the embodiment defined by Claim 1 is neither anticipated by, nor obvious in view of the cited references, and reconsideration thereof is respectfully requested.

Claim 11

The comments provided above with respect to Claim 1 are hereby incorporated by reference. Claim 11 has been similarly amended to more clearly define the embodiment therein. For similar reasons as provided above with respect to Claim 1, Applicant respectfully submits that Claim 11, as amended, is likewise neither anticipated by, nor obvious in view of the cited references, and reconsideration thereof is respectfully requested.

Claims 2-10 and 12-20

Claims 7, 9-10, 17 and 19-20 have been canceled, rendering moot the rejection of these claims. Claims 2-6, 8, 12-16 and 18 depend from and include all of the features of Claims 1 or 11. Claims 2-6, 8, 12-16 and 18 are not addressed separately but it is respectfully submitted that these claims are allowable as depending from an allowable independent claim, and further in view of the comments provided above. Reconsideration thereof is respectfully requested.

VII. Additional Amendments

Claims 21-26 have been newly added by the present Response. Applicant respectfully requests that new Claims 21-26 be included in the Application and considered therewith.

VIII. Conclusion

In view of the above amendments and remarks, it is respectfully submitted that all of the claims now pending in the subject patent application should be allowable, and reconsideration thereof is respectfully requested. The Examiner is respectfully requested to telephone the undersigned if he can assist in any way in expediting issuance of a patent.

Enclosed is a PETITION FOR EXTENSION OF TIME UNDER 37 C.F.R. §1.136 for extending the time to respond up to and including April 20, 2007.

The Commissioner is authorized to charge any underpayment or credit any overpayment to Deposit Account No. 06-1325 for any matter in connection with this response, including any fee for extension of time, which may be required.

Respectfully submitted,

Date: 2007-04-09 By: /Karl F. Kenna/

Karl F. Kenna
Reg. No. 45,445

Customer No.: 23910
FLIESLER MEYER LLP
650 California Street, Fourteenth Floor
San Francisco, California 94108
Telephone: (415) 362-3800